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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,782	10/18/2001	Thomas D. Schaefer	GEMS0123PUS	5442

27256 7590 09/22/2004

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EXAMINER	
VU, JIMMY T	

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/682,782	SCHAEFER ET AL.	
	Examiner	Art Unit	
	Jimmy T Vu	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02/12/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The references listed on the information disclosure statement submitted on 02/12/2002 have been considered.

Claim Objections

1. Claims 2-9, 11 and 13-16 are objected to because of the following informalities:

In claim 2-9, 11 and 13-16, line 1 of each claim, change "A" to --The--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Klostermann (U.S. Patent number 4,811,375)

Regarding claims 1 and 17, Klostermann discloses a filament circuit resistance adjusting apparatus, for a filament circuit having a filament (82) (Figs. 5 and 13) with a first resistance, said apparatus comprising a first resistor (122) electrically coupled to the filament and having a

second resistance, said first resistor adjusting the resistance of the filament circuit (Figs. 5 and 13, col. 11, lines 1-67).

Regarding claim 2, Klostermann discloses the apparatus wherein said first resistor is in series with or parallel to the filament (Figs. 1 and 13).

Regarding claim 3, Klostermann discloses the apparatus further comprising one or more resistors (126-129) electrically coupled to said first resistor and further adjusting the resistance of the filament circuit (Figs. 5 and 13).

Regarding claim 4, Klostermann discloses the apparatus wherein said one or more resistors are in series with, parallel to, or are both in series with and parallel to said first resistor and the filament (Figs. 5 and 13).

Regarding claim 5, Klostermann discloses the apparatus further inherently comprising a circuit board electrically coupled to the filament and the first resistor; wherein said circuit board supports the first resistor (Figs. 1-24).

Regarding claim 6, Klostermann discloses the apparatus wherein the circuit board comprises a heat sink layer (29) (Figs. 2, 8 and 11).

Regarding claim 7, Klostermann discloses the apparatus further comprising a heat sink coupled to the circuit board and said first resistor (Figs. 1-24).

Regarding claim 8, Klostermann discloses the apparatus further comprising a resistor socket electrically coupled to said circuit board and said first resistor, wherein said first resistor plugs into said socket (Figs. 1-24).

Regarding claim 9, Klostermann discloses the apparatus further comprising a filament resistance adjusting apparatus socket electrically coupled to the filament and the circuit board, wherein said circuit board plugs into said socket (Figs .1-24).

Regarding claim 10, Klostermann discloses a filament resistance adjusting apparatus, for a first filament circuit having a first filament (82) (Figs. 5 and 13) with a first resistance, said apparatus comprising:

a circuit board inherently electrically coupled to the first filament (Figs. 1-24); and

a first resistor (122) electrically coupled to said circuit board and the first filament and having a second resistance, said first resistor is in series with the first filament and adjusting the resistance of the first filament circuit (Figs. 1-24, col. 11, lines 1-67, col. 12, lines 35-67).

Regarding claim 11, Klostermann discloses the apparatus further comprising:

a second filament (82-85) (Fig. 4) having a third resistance; and

a second resistor (126-129) (Fig. 5, col. 11, lines 30-40) having a fourth resistance, said second resistor is electrically coupled to said second filament and said circuit board; said second resistor is in series with the second filament and adjusting the resistance of the second filament circuit (Figs. 1-24, col. 11, lines 1-67, col. 12, lines 35-67).

Regarding claim 12, Klostermann discloses the imaging tube (10) (Figs. 1-24) assembly having a filament circuit comprising:

a cathode comprising a filament (82); and

a filament circuit resistance adjusting apparatus comprising:

a circuit board inherently electrically coupled to the filament (Figs. 1-24); and

a first resistor (122) electrically coupled to said circuit board and the filament and having a second resistance, said resistor adjusting the resistance of the filament circuit (Figs. 1-24, col. 11, lines 1-67, col. 12, lines 35-67).

Regarding claim 13, Klostermann discloses the apparatus further comprising an encasing having a recessed portion wherein said filament circuit resistance adjusting apparatus is positioned within said recessed portion (Figs. 2, 6, 8, and 11).

Regarding claim 14, Klostermann discloses the apparatus further comprising a filament circuit resistance adjusting apparatus socket electrically coupled to the filament and the circuit board, wherein said circuit board plugs into said socket (Figs. 1-24).

Regarding claim 15, Klostermann discloses the apparatus further comprising a cathode (81) receptacle electrically coupled to said filament circuit resistance adjusting apparatus socket (Figs. 1-24).

Regarding claim 16, Klostermann discloses the apparatus further comprising a resistor socket electrically coupled to said circuit board and said first resistor (Figs. 1-24).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Vu whose telephone number is (571) 272-1832. The examiner can normally be reached on M - F: 9 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2800.

Jimmy Vu

September 16, 2004

Don Wong
Supervisory Patent Examiner
Technology Center 2800